

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
23 October 2003 (23.10.2003)

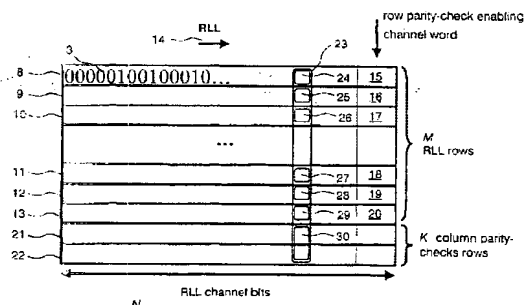
PCT

(10) International Publication Number
WO 03/088501 A2

- (51) International Patent Classification: **H03M 13/00** (74) Agent: **DEGUELLE, Wilhelmus, H., G.**; internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (21) International Application Number: **PCT/IB03/01542**
- (22) International Filing Date: **17 April 2003 (17.04.2003)** (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data: **02076526.9** **18 April 2002 (18.04.2002)** **EP**
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- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— *without international search report and to be republished upon receipt of that report*

[Continued on next page]

(54) Title: **SIGNAL, STORAGE MEDIUM, METHOD AND DEVICE FOR ENCODING, METHOD AND DEVICE FOR DECODING**



(57) Abstract: The invention relates to a signal comprising a runlength limited (RLL) encoded binary d,k channel bitstream 3, wherein parameter d defines a minimum number and parameter k defines a maximum number of zeroes between any two ones of said bitstream 3 or vice versa, comprising a number of sections of respectively N successive RLL channel bits, called RLL rows 8-13, 45, each RLL row 8-13, 45 representing a parity-check code-word, called row parity-check code-word, in which a so-called row-based parity-check constraint for said RLL row 8-13, 45 has been realized, characterized in that K sections of respectively N successive channel bits, called column parity-check rows 21, 22, 43, 44, 46, are located at predetermined positions of a group of M RLL rows 8-13, 45. K, N and M being integer values, said column parity-check rows 21, 22, 43, 44, 46 comprising a plurality of column parity-check enabling channel words 30, 42, 48, wherein each of said column parity-check enabling channel words 30, 42, 48 realizes a so-called column-based parity-check constraint for all so-called corresponding segments 24-29 of at least said M RLL rows 8-13, 45 of said group that correspond to a specific column parity-check enabling channel word 30, 42, 48, hereby constituting a column parity-check codeword. Furthermore, the invention relates to a storage medium comprising such a signal as well as a method and a device for encoding a stream of user data bits into such a signal as well as a method and a device for decoding such a signal.

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INTERNATIONAL SEARCH REPORT

International Application No.

PC IB 03/01542

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H03M5/14 H03M13/11 H03M13/29

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, IBM-TDB, COMPENDEX, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Date of the actual completion of the international search

14 October 2003

Date of mailing of the international search report

29/10/2003

Name and mailing address of the ISA

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International Application No.

PC, IB 03/01542

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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International Application No

PL., IB 03/01542

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P. IB 03/01542

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